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EXAMINER

ABDOSHI, SAMIR

ART UNIT	PAPER NUMBER
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3641

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02/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/588,988	Applicant(s) AALTO, JUHA	
	Examiner SAMIR ABDOSH	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 19 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2 and 4-9 is/are rejected.
- 7) ☐ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. PCT/FI05/50021.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is a final office action rejection on the merits. Applicant's amendments were received on November 19th, 2008, wherein claims 1-5 were amended and claims 6-9 were added as new claims for prosecution. Presently, claims 1-9 are pending and have been examined as follows.

Response to Amendment

1. In light of the amendments to the claims, the all prior claim objections and rejections under 35 USC § 112 are hereby withdrawn.

Claim Objections

2. Claim 7 is objected to because of the following informalities: the term "*barrel lock stop*" lacks proper antecedent basis and thereby renders the claim indefinite, the claim will be interpreted for purposes of examination as *--barrel block stop--*. Appropriate correction is required for further prosecution.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is particularly confusing in its description of the lock frame component of the invention. The phrase "*the lock frame comprises a spring-loaded support plate, under which support plate the screw is provided*"

Claim 6 uses the term “*about*”, which implies a tolerance that disclosed in neither the claim itself nor the supporting specification. Resultantly, the claim fails to provide a definitive range of acceptable angles that pertain to the applicant’s claimed invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

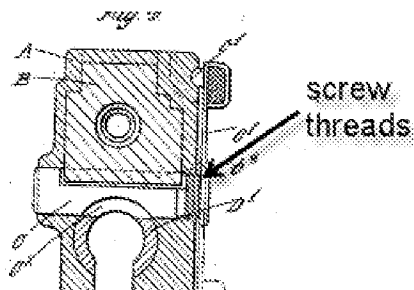
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by North (US 1,363,262).

As per claim 1, and 7-9, North teaches a system for fastening the barrel **(B)** of a rifle with replaceable barrel, the system consisting of a lock frame **(A)**, into which the barrel socket can be pushed into position and locked with a bolting device wherein the bolting device consists of a barrel block stop **(a¹)** provided at the top of the lock frame **(A)** and defines one extent of a headspace in the barrel (*headspace* is interpreted to be synonymous with *clearance* since an explicit definition is not set forth in the claims or specification, North clearly shows the block stop providing headspace to the barrel allowing for an angled insertion), a groove **(b)** in the socket of the barrel **(B)** being insertable into the stop **(a')** when the barrel **(B)** is clamped into locked position (see Figures 1 and 5 for position of elements during locked configuration); and

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a screw provided for clamping the socket of the barrel in the lock frame against the barrel block stop (via elements **C**, **C^x**, and **C¹**, all three of these elements make up a handled pin-type screw securing mechanism that fasten and release a barrel from the block stop as shown in Figure 4, the same figure also illustrates a threaded connection thereby categorizing the element as a *screw*).



As per claims 4 and 6, North teaches the opening in the lock frame (**A**) has been shaped such that the barrel socket can be pushed into the lock frame (**A**) at a small angle (including 5 degrees or less, the Figures illustrate an insertion angle as large as what appears to be 30 degrees), with the flange portion (**b¹**) of the groove (**b**) in the barrel socket being allowed to pass by the block stop (**a¹**) before the barrel (**B**) is clamped into position (Figure 3 illustrates the small angle with which the barrel **B** installs into lock frame **A**, Figures 3 and 5 indicate that the flange portion **b¹** of groove **b** passes by the block stop portion **a¹** of lock frame **A**).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over North (US 1,363,262), as applied in claim 1 above, in view of Rieger (US 4,729,186).

As per claim 2, North teaches a barrel block stop (element **a'** and locking pin **C** both function as block stops) whose acruate portion settles in a groove (**b³**) in the barrel socket in locked position (Figure 4 diagrams how pin **C** settles in groove **b³** and Figure 5 illustrates a cross section of the pin **C** traveling transversely through the groove **b³** in the locked position), but fails to explicitly teach that the barrel block stop is a separate device fastened to the lock frame.

North fails to teach a separable barrel block stop fastened to the lock frame, however the claimed invention fails to demonstrate evidence supporting the criticality of a separable barrel block stop as opposed to the integral barrel block stop taught by North. Therefore, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to make the block stop separable since it has been held that making separate parts of a single integral device involves only routine skill in the art (*In re Dulberg* 129 USPQ 348).

As per claim 5, North teaches barrel (**B**) with a plane surface (see Figure 4 for diagram of planar surfaces of barrel **B**), but fails to explicitly teach the underside of the barrel socket bearing against a support plate.

Rieger discloses a firearm with barrel holder for interchangeable barrels that teaches the use of a lock bolt (**24**) that clamps an interchangeable barrel (via projecting extension **13**) in a secure fashion against the locking frame (**3**) (see Figures 1 and 2 for

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diagram of elements and column 4, lines 52-63 for detailed description of lock bolt function).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the barrel taught by North to include the locking support bolt taught by Rieger in order to provide a means of positioning the barrel securely between locked and unlocked positions (see column 4, lines 57-63 for description of lock bolt engaging the barrel in locking position and column 5, lines 29-39 for description of lock bolt transitioning the barrel into unlocked position).

Response to Arguments

9. Applicant's arguments filed November 19th, 2008 have been fully considered and are persuasive with respect to the rejection of claim 3, and are not persuasive for claims 1, 2, 4 and 5 .

In re rejections under 35 USC 102

The applicant asserts that the rejections to claims 1 and 4, made under this section, are improper due to the added limitation to claim 1 that incorporates a locking screw. The Examiner respectfully disagrees.

In support of the applicant's position, the applicant has also claimed that locking device C of the reference is not a screw and does not clamp the breech end of the body. Structurally however, locking screw C includes a threaded connection and also includes a leveraging handle C¹ that engages and disengages barrel from a secured

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position, thereby making it a screw capable of clamping the socket of the barrel against the block stop.

In re rejections under 35 USC 103

With respect to claim 2, the applicant argues that properties of the block stop, as written in the claim, make it a non-obvious feature based on the rejection cited. The Examiner respectfully disagrees.

The applicant is reminded that the obviousness rejection to claim 2 was not related to the block stop *per se* (the physical features taught by North as described in the rejection), but rather the separable feature of the unit. The cited case law stipulates that that should it be desirable to remove a component of prior art for any reason, it would be obvious to make that feature removable for that purpose. Such a reason can be obtained in the applicant's own rebuttal.

With respect to claim 5, the applicant requests that the obvious rejection be withdrawn due to the fact that a support plate is not disclosed in either of the references used in the rejection. The Examiner respectfully disagrees.

Contrary to the applicant's assertion, both North and Reiger teach a support plate. The applicant is reminded that claim 5, accompanying all the features of claim 1, fails to provide any sort of special definition describing a particular support plate. In other words, any of the limitations, features, functions, or capacities the applicant has sought to imply with regard to the support plate have not been considered do the

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broadly recited language found *in the claims*. As such, proper examination calls for the broadest reasonable interpretation of such language and the term “*a support plate*” is construed simply as a flat surface. Both North and Reiger teach such surfaces (e.g. Reiger element **18**).

Allowable Subject Matter

10. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to explicitly teach or disclose a lock frame opposite a barrel block stop that includes a support plate under which a clamping screw can be tightened thereby clamping the block stop, lock frame, and barrel socket in a secured engagement.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMIR ABDOSH whose telephone number is (571) 270-5799. The examiner can normally be reached on Monday through Friday 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Carone/
Supervisory Patent Examiner, Art Unit 3641

SIA